



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,765	12/26/2001	Hong Man Moon	8733.514.00	5858

30827 7590 08/26/2003

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

NGUYEN, HOAN C

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/025,765	Applicant(s) MOON, HONG MAN	
	Examiner HOAN C. NGUYEN	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-3,5-7,9-12,14-26,28 and 29 is/are pending in the application.

4a) Of the above claim(s) 4, 8, 13 and 27 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-3,5-7,9-12,14-26,28 and 29 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other:

DETAILED ACTION

Response to Amendment

Applicant's arguments with respect to Amended independent claims 1, 5, 9, and 24 have been considered but are moot in view of the new ground(s) of rejection.

Therefore, this is Final action.

Applicant cancelled claims 4, 8, 13 and 27.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5-7, 9-11, 14-20, 23-26, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US6327011B2) in view of Otaki et al. (US6509076B1).

In regard to claims 1-3, 5-7, 9-11, 24-26 and 28-29, Kim teaches (Figs. 1a-b and 2-4) LCD device comprising:

- first and second etched glass substrates having normally refractive index of 1.50;
- a liquid crystal layer 15 between the first and second etched substrates; and

Art Unit: 2871

- passivation films (protection film 8/18) outside the first and second etched substrates, this passivation films have refractive index of 1.4-1.6 (1.4 about 10% of 1.5 or 1.5 about 10% of 1.6)

wherein

- the passivation film is formed of a material having a refractive index within about 10% difference of the refractive index of at least one of the first and second etched substrates.
- injecting a liquid crystal between the first and second substrates, after forming the passivation film on the surface of the first and second substrates (claim 14).
- polishing the surface of the first and second substrates after etching a surface of at least one of the first and second substrates.
- polishing (grinding) includes mechanically polishing the assembled substrates while spraying coolant on the assembled substrates.
- mechanically polishing includes polishing with sandpaper; mechanically polishing includes polishing with a polisher. They are steps includes in grinding step.
- the etching includes dipping the substrate into an etchant (claim 20).
- assembling the first and second substrates with each other includes a sealing pattern.

However, Kim fails to disclose the passivation film made of BenzoCycloButten (BCB) or photo-acrylate.

Otaki et al. teach the passivation film [comprising a first pressure-sensitive adhesive layer 3, a volume hologram layer 5, a second pressure-sensitive adhesive layer 4, and a surface protective film 6, the second pressure-sensitive adhesive layer having been formed from an acrylic pressure-sensitive adhesive comprising an acrylic copolymer resin] made of photo-acrylate (acrylic copolymer resin) for pressure-sensitive adhesive.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify LCD device comprising as Kim disclosed with the organic film made of photo-acrylate for laminating with pressure-sensitive adhesive layer.

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US6327011B2) in view of Otaki et al. (US6509076B1) as claims 1-3, 5-7, 9-11, 14-20, 23-26, 28 and 29 above, in further view of Walters et al. (US6150430A).

Walter et al. teach the organic film is formed by a spin coating process for preparing a thin organic film.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify LCD device comprising as Kim disclosed with teach the organic film is formed by a spin coating process for preparing a thin organic film.

Art Unit: 2871

3. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US6327011B2) Otaki et al. (US6509076B1) as claims 1-3, 5-7, 9-11, 14-20, 23-26, 28 and 29 above, in further view of Dob (US20020079289A1).

Dob teaches the etchant is an HF solution by exothermic reaction between the glass substrate and the etchant for uniformly etching the surface of the glass substrate.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify LCD device comprising as Kim disclosed with the etchant is an HF solution by exothermic reaction between the glass substrate and the etchant for uniformly etching the surface of the glass substrate.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2871

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (703) 306-0472. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

HOAN C. NGUYEN
Examiner
Art Unit 2871

chn
August 22, 2003

TOANTON
PRIMARY EXAMINER